The MT Laboratory Sentinel

Updates from the MT Laboratory Services Bureau
11/11/**09** **http://healthlab.hhs.mt.gov/**

Blood Splashes & Phlebotomy

Nearly a year ago, DenLine Uniforms Inc., Quincy, IL, conducted a voluntary, self-administered nationwide survey among medical professionals who draw blood. The objective was to determine if blood from a patient splashes beyond the hand area, contacting the health care professional's skin, eyes, mouth, mucous membranes or personal clothing. The survey also set out to determine if the causes for blood splashing beyond the hand area can be eliminated through engineering and work practices under Definitions 29 CFR 1910.1030(b)-6 for Occupational Exposure.

The results may astound you. 74% say they have experienced blood splashing beyond the hand area. What's more startling is that nearly 44% do not always report such incidents!

Fear of job ramifications (e.g., being perceived as at fault and incompetent), too long to complete paperwork and no reporting policy are just a few of the reasons cited for not reporting incidents.

Let these startling results serve as a wake-up call. Do your employees feel comfortable coming to you to report a splash or spill? Are they fully aware and trained in your laboratory's accident reporting policy? Do they know how to properly use engineering devices and other protocols provided for their protection?

Additional eye-opening results from DenLine Uniforms' survey are revealed in this issue and online this month. In print, they accompany an article by safety guru Terry Jo Gile titled "Safety Training by Gaming," which provides tips on how to effectively and creatively educate your staff on proper safety protocol.

Read the article and study the results, ensuring that your laboratory and its valuable workforce are compliant in all areas. I welcome discussion via our online forums and invite you to contact Dennis Adams at dadams.denline@gmail.com for the full report.
Lynn Nace, Editor, Advance Magazine Aug 11, 2009
lnace@advanceweb.com http://laboratory-manager.advanceweb.com/Editorial/Content/Editorial.aspx?CC=204452

Montana Public Health Prevention Opportunities Under the Big Sky

To view the November 2009 issue, depress the control key and click on:

Use of Influenza Antiviral Medication for 2009 H1N1 Infections

APHL Association of Public Health Laboratories

From the department of Food Safety

Diagnosis of Shiga Toxin-Producing *E. coli* Infections by Clinical Laboratories

The Association of Public Health Laboratories and a host of clinical, academic, and public health partners joined CDC in writing an *MMWR Recommendations and Report* issue entitled, "Recommendations for Diagnosis of Shiga Toxin-Producing *Escherichia coli* Infections by Clinical Laboratories."

The report highlights the importance of prompt and accurate diagnosis of STEC infections in proper patient treatment, public health surveillance, and outbreak control. Detailed recommendations for STEC testing by clinical laboratories are provided, including the recommendation that all stools submitted for routine testing from patients with acute community-acquired diarrhea be simultaneously cultured for O157 STEC and tested with an assay that detects Shiga toxins (to detect non-O157 STEC).

APHL's STEC work group, in conjunction with state and federal partners, is developing guidelines for receiving and characterizing STEC isolates and specimens in public health laboratories. These companion guidelines will be released in early 2010.

QUESTIONS ABOUT INFLUENZA TESTING?

A dedicated telephone number has been established at the MT Public Health Laboratory for questions related to Influenza testing. You may call directly to 406-444-5526 or call 1-800-821-7284 & select extension 5526.

Visit our website for additional information
http://www.dphhs.mt.gov/PHSD/Lab/environ-lab-index.shtml

Researchers Explore New Approach to Reduce Pathogenic Bacteria on Chicken Meat

A mixture of some organic acids and some extracts from plants turns out to be enough to greatly reduce pathogenic bacteria on chicken breast meat. Add some irradiation to the mix and it makes a lethal combination against the bacteria.

Food Safety Consortium researchers at the University of Arkansas found they could greatly reduce *E. coli O157:H7*, *Listeria monocytogenes* and *Salmonella Typhimurium* in the chicken breast meat by infusing combinations of organic acids – acetic, citric, lactic, malic and tartaric – into the meat. The experiments were also performed with **extracts from green tea and grape seeds in combination with the acids.**

The researchers are also using the plant extracts to serve as antioxidants, which minimizes lipid oxidation. Lipid oxidation is a process that causes meat quality to deteriorate by adversely affecting characteristics such as flavor, color and texture. They examined the effects of irradiation on the chicken's color and texture and found no significant change.

To read the entire article go to: *ScienceDaily* http://www.sciencedaily.com-/releases/2009/05/090527175333.htm
Chicken Meat: Organic Acids, Plant Extracts And Irradiation Combine To Beat The Bacteria, 2009, June 1 *University of Arkansas, Food Safety Consortium*,

MT Communicable Disease Update as of 11/06/09

This newsletter is produced by the Montana Communicable Disease Epidemiology Program.
Questions regarding its content should be directed to 406.444.0273 (24/7/365).
http://cdepi.hhs.mt.gov

DISEASE INFORMATION

Summary – Week 43 – Ending 10/31/09 – Disease reports received at DPHHS during the reporting period October 25-31, 2009 included the following:

- Vaccine Preventable Diseases: Pertussis (4) *See Coughs information below!*
- Enteric Diseases: *Campylobacter* (2), Cryptosporidia (1), *Salmonella* (2)
- Other Conditions: Creutzfeldt-Jakob Disease (1), Viral Meningitis (1), Legionella (1)
- Travel Related Conditions: None

NOTE: The spreadsheets have multiple pages, each indicated by a tab in the bottom left corner. Tabs on the worksheet reflect the following: (1) vaccine preventable and enteric diseases YTD; (2) other communicable diseases; (3) cases just this week; (4) clusters and outbreaks; and (5) an STD summary.

THE "BUZZ"

INFLUENZA

During week 43 (10/25/09 - 10/31/09), influenza activity remained high in the United States as reported in FluView. Flu activity is widespread in 48 states. Nationally, visits to doctors for influenza-like-illness declined slightly from last week, but are still very high. Flu-related hospitalizations and deaths continue to increase and are very high nation-wide compared to what is expected for this time of year. Almost all of the influenza viruses identified so far continue to be 2009 H1N1 influenza A viruses. These viruses remain similar to the virus chosen for the 2009 H1N1 vaccine, and remain susceptible to the antiviral drugs oseltamivir and zanamivir with rare exception

NEW! Activity in Montana – Activity in Montana continues at WIDESPREAD. The majority of influenza is 2009 H1N1 influenza A. *No other subtypes of **influenza A** are circulating at this time in Montana.* Anyone with a rapid test positive for influenza A can be assumed to have 2009 influenza A (H1N1). *Negative rapid tests for influenza A do not necessarily mean the person does not have influenza; sensitivity for these tests varies.*

Type B influenza was identified in Montana in early October. Please send specimens that are rapid test positive for influenza B to the Montana Public Health Laboratory for confirmation, in order to assess the performance of rapid tests.

IMPORTANT! Hospitalized/Death Reporting - *Please report all laboratory confirmed (PCR, rapid test, viral culture positive) hospitalized cases and deaths due to all types of influenza to the local health department who will then report to the state. Period of interest: August 30, 2009 – present. There is a "catch-up" form for the period August 30 – October 31 and individual case reports starting November 1. Forms attached and are also on the TCC. Please pay special attention to capturing information about underlying medical conditions, particularly pregnancy or post-partum status.*

Peramivir is ordered directly from the CDC: http://emergency.cdc.gov/h1n1antivirals/

UPDATE! MT Public Health Laboratory Testing - The number of PCR tests and the percent positivity has decreased over the last two weeks. Updated information about influenza testing (instructions and volumes) in Montana can be found at: http://www.dphhs.mt.gov/PHSD/Lab/environ-lab-index.shtml.
Questions about influenza testing? 406-444-5526 or 1-800-821-7284 and select extension 5526

Continued on page 2……

MT Communicable Disease Update as of 11/06/09

IMPORTANT! Coughs – Pertussis vs Influenza – It is sometimes difficult to distinguish between coughs caused by different pathogens – especially when influenza and pertussis are co-mingling. ***Anyone with a cough of >14 days duration, an inspiratory whoop and/or post-cough vomiting or breathlessness should be tested for pertussis.*** Ensure appropriate treatment of cases and prophylaxis for close contacts. Ensure that school aged children are up-to-date on their vaccinations (including Tdap for those 11 – 18) and that adults 19 – 64 are receiving the Tdap vaccine for tetanus boosters, as appropriate. (http://www.cdc.gov/mmwr/PDF/rr/rr5517.pdf) **Use the *CDC Guidelines for the Control of Pertussis Outbreaks* for case investigation and follow-up.** (http://www.cdc.gov/vaccines/pubs/pertussis-guide/guide.htm)

INFORMATION / ANNOUNCEMENTS

NEW! Influenza New Guidance (http://www.cdc.gov/h1n1flu/whatsnew.htm)

H1N1 Influenza in Animals (including companion animals)
- http://www.cdc.gov/h1n1flu/qa.htm Companion animals at the end of document
- http://www.cdc.gov/H1N1flu/HAN/110609.htm Commercial swine farm guidance
- http://www.usda.gov/wps/portal/?navid=USDA_H1N1

Donning Disposable Respirators (Poster)
- http://www.cdc.gov/h1n1flu/eua/pdf/n95instructions.pdf

Key Issues for Clinicians for Concerning Use of Antivirals for 2009 H1N1
- http://www.cdc.gov/H1N1flu/HAN/110609.htm

Several new educational videos were posted this week – antiviral drugs, how to prevent spread, warning signs that warrant a visit to a medical provider

Weekly Updates on Vaccine Status (Fridays)
- www.cdc.gov/h1n1flu/vaccination/vaccinesupply.htm